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10/826,520	04/16/2004	Qiang Li	U001 100085	1941

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UTSTARCOM, INC.
c/o Laura Weiss, Paralegal
3800 Golf Road, Suite 220
Rolling Meadows, IL 60008

EXAMINER

ANWARI, MACEEH

ART UNIT	PAPER NUMBER
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2444

NOTIFICATION DATE	DELIVERY MODE
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04/03/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/826,520	Applicant(s) LI ET AL.	
	Examiner MACEEH ANWARI	Art Unit 2444	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/01/2004, 11/27/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to communications file on 4/16/2004. Accordingly, **claim(s) 1- 25** are pending.

Claim Objections

2. **Claim 5** (and ultimately all claims following it) is objected to because of the following informalities: the numbering of the claim is off it should be changed to **claim**
4. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
- The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. **Claim 20** recites the limitation "the MD" and/or "the MLR". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
6. **Claims 1- 25** are rejected under 35 U.S.C. 103(a) as being unpatentable over **DeFreese et al.** (hereinafter **DeFreese**, U.S.Pat. No.: 6, 493, 876 B1) as applied to and further in view of **Wilson** (U.S. Pub. No.: 2002/0184649 A1).
7. Regarding **claim 10**, **DeFreese** discloses: a method for scalable distributed multimedia streaming comprising the steps of:

providing a communications network (**DeFreese: Fig. 2; communication network**);

connecting at least one media station to the network having a media director and a plurality of media engines (**DeFreese: Fig. 2; cable headend for services and overall control**);

providing a media location registry (**DeFreese: Fig. 2; Distribution hubs**);

downloading content to be presented (**DeFreese: Abstract; delivery of high quality television programs, cable and online services**);

communicating from the media location registry to a media director in each media station the content to be distributed (**DeFreese: Fig. 1- 2 and col. 3 line 48– col. 4 line 6; communications network with various data forwarding channels**);

directing through media director in the media station independent retrieval over the network of media content by at least one selected media engine (**DeFreese: Fig. 2 and Abstract; video on demand and pay per view programming**);

storing the media content on the selected media engine (**DeFreese: Fig. 1-3; memory management unit**);

tracking content stored on the media engines in the media director;

storing the location of all media content in the media station in the media location registry;

redirecting a content request from a media console connected to the media station through the network to a selected one of the media engines storing content

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corresponding to the request for streaming (**DeFreese: Abstract and Col. 11 lines 11-36; PPV, NVOD, VOD and MPEG-2 transport stream**);

streaming media content over the network from the selected media engine to the media console (**DeFreese: Abstract and Col. 11 lines 11-36; PPV, NVOD, VOD and MPEG-2 transport stream**).

However, **DeFreese** remains silent on the specific teachings of tracking content stored on the media engines in the media director; and storing the location of all media content in the media station in the media location registry.

In the same field of endeavor, **Wilson** discloses tracking content stored on the media engines in the media director (**Wilson: Fig. 11-12 and Abstract; PIDs**); and storing the location of all media content in the media station in the media location registry (**Wilson: Fig. 11-12 and Abstract; PID and program tables**).

Accordingly it would have been obvious to one of ordinary skill in the networking art to combine **Wilson's** the association of packet identifiers to session numbers with the teachings of **DeFreese** to provide for a more transparent system.

8. Regarding **claim 11**, **DeFreese-Wilson** further disclose: employing a plurality of media stations wherein the step of downloading content comprises the steps of:

transferring metadata of a program to a content manager (**DeFreese: Fig. 14, 16 & 30 and Abstract; program active listings/timings**);

instructing a content engine to transfer the program data into a Home Media Station (**Wilson: Fig. 1; DHCT**);

updating the state of the program to "inactive" and specifying a publish time to the content manager (**DeFreese: Fig. 14, 16 & 30 and Abstract; near video on demand, program active listings/timings and messaging/warning mechanisms**);

sending distribution parameters to the media location register (**DeFreese: Fig. 14, 16 & 30 and Abstract; near video on demand, program active listings/timings and messaging/warning mechanisms**);

distributing the program (**DeFreese: Fig. 14, 16 & 30 and Abstract; near video on demand, program active listings/timings and messaging/warning mechanisms**);

sending a "publish" command to the media station at the publish time to start the service of the program (**DeFreese: Fig. 14, 16 & 30 and Abstract; near video on demand, program active listings/timings and messaging/warning mechanisms**).

9. Regarding **claim 12, DeFreese-Wilson** further disclose: wherein distributing the program comprises the steps of:

directing the media director in a seeking media station to obtain the program including identifying a source media station where the content is present (**DeFreese: Fig. 14, 16 & 30 and Abstract; near video on demand and active program listings/timings**);

requesting from the media director of the source media station the location of the needed segment (**DeFreese: Fig. 14, 16 & 30 and Abstract; near video on demand and active program listings/timings**);

notifying the seeking media director of the location of the segment in selected media engine (**Wilson: Fig. 11-12 and Abstract; PID and program tables**);

directing by the seeking media director a receiving media engine in the seeking media station to fetch the segment from the selected media engine (**Wilson: Fig. 11-12 and Abstract; PID and program tables**);

requesting a copy of the segment from the selected media engine (**DeFreese: Fig. 14, 16 & 30 and Abstract; near video on demand and active program listings/timings**);

transferring the segment from the selected media engine to the receiving media engine (**DeFreese: Fig. 14, 16 & 30 and Abstract; near video on demand and active program listings/timings**);

notifying the seeking media director that the copying of the segment is complete database (**Wilson: Fig. 11-12 and Abstract; PID and program tables**); and,

notifying the media location register of the new location of the segment for addition to the location database (**Wilson: Fig. 11-12 and Abstract; PID and program tables**).

10. Regarding **claim 13, DeFreese-Wilson** further disclose: wherein the source media station is the home media station (**Wilson: Fig. 1; DHCT**).

11. Regarding **claim 14, DeFreese-Wilson** further disclose: wherein content requested by the media console is not present on the media station and comprising the steps of:

receiving a streaming request through the media director (**DeFreese: Abstract; NVOD, VOD and PPV**);

querying the media location registry for the location of the program or segment requested (**Wilson: Fig. 11-12 and Abstract; PID and program tables**);

responding from the media location registry with locations for the segment (**Wilson: Fig. 11-12 and Abstract; PID and program tables**);

selecting a source media station by the media director (**Wilson: Fig. 11-12 and Abstract; PID and program tables**);

requesting the location of the segment from a media director in the source media station (**Wilson: Fig. 11-12 and Abstract; PID and program tables**);

responding with the address of a source media engine having the segment (**Wilson: Fig. 11-12 and Abstract; PID and program tables**);

directing a selected target media engine to fetch the segment; requesting by target media engine a copy of the segment from source media engine (**DeFreese: Fig. 14, 16 & 30 and Abstract; near video on demand and active program listings/timings**);

sending the segment to the target media engine (**DeFreese: Fig. 14, 16 & 30 and Abstract; near video on demand and active program listings/timings**);

notifying the media director of completion of the copy and notifying the media location register of the new location of the segment (**DeFreese: Fig. 14, 16 & 30 and Abstract; near video on demand, program active listings/timings and messaging/warning mechanisms**).

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12. Regarding **claim 15, DeFreese-Wilson** further disclose: wherein the step of selecting a source media station further comprises the steps of:

identifying multiple locations may exist where the desired segment is stored
(DeFreese: Fig. 14, 16 & 30 and Abstract; near video on demand, program active listings/timings and messaging/warning mechanisms);

calculating the relative cost of obtaining the desired copy of the segment based on a number of parameters including the bandwidth available, distance from the source media station, copying time and load of the source media station **(DeFreese: Fig. 14, 16 & 30 and Abstract; near video on demand, program active listings/timings and messaging/warning mechanisms).**

13. Regarding **claim 16, DeFreese-Wilson** further disclose: wherein the steps of redirecting a content request and streaming media content comprise the steps of:

receiving a request for a first segment by the media director from the media console **(DeFreese: Fig. 14, 16 & 30 and Abstract; near video on demand, program active listings/timings and messaging/warning mechanisms);**

identifying the location of the first segment in a segment location table **(Wilson: Fig. 11-12 and Abstract; PID and program tables);**

redirecting the media console to the IP address of a first media engine **(Wilson: Fig. 11-12 and Abstract; PID and program tables);**

requesting the first segment from the first media engine **(DeFreese: Fig. 14, 16 & 30 and Abstract; near video on demand, program active listings/timings and messaging/warning mechanisms);**

streaming data from the first media engine (**DeFreese: Fig. 14, 16 & 30 and Abstract; near video on demand, program active listings/timings and messaging/warning mechanisms**);

detecting the segment being streamed as near its end (**DeFreese: Fig. 14, 16 & 30 and Abstract; near video on demand, program active listings/timings and messaging/warning mechanisms**);

requesting the location of the next segment from the Media director (**Wilson: Fig. 11-12 and Abstract; PID and program tables**);

locating the next segment in the segment location table (**Wilson: Fig. 11-12 and Abstract; PID and program tables**);

replying with the identification of the next segment and the IP address of a second media engine where the next segment resides (**Wilson: Fig. 11-12 and Abstract; PID and program tables**);

notifying the second media engine to preload the next segment (**DeFreese: Fig. 14, 16 & 30 and Abstract; near video on demand, program active listings/timings and messaging/warning mechanisms**);

upon completion of the streaming of the first segment, directing the second media engine to start streaming the next segment to the IP address of the media console (**Wilson: Fig. 11-12 and Abstract; PID and program tables**);

streaming the data of the next segment from the second media engine to the media console (**DeFreese: Fig. 14, 16 & 30 and Abstract; near video on demand, program active listings/timings and messaging/warning mechanisms**);

upon assumption of the communication of the stream with the Media console by the second media station, notifying the media director (**DeFreese: Fig. 14, 16 & 30 and Abstract; near video on demand, program active listings/timings and messaging/warning mechanisms**).

14. Regarding **claim 17, DeFreese-Wilson** further disclose: wherein the steps of detecting the segment being near its end through notifying the media director are repeated until the media console orders a cessation of streaming by the media engine at which time the media engine notifies the media director that the streaming has stopped (**DeFreese: Fig. 14, 16 & 30 and Abstract; near video on demand, program active listings/timings and messaging/warning mechanisms**).

15. Regarding **claim 18, DeFreese-Wilson** further disclose: wherein the segment location table identifies a plurality of media engines in which the segment is stored and in which the step of identifying the location includes the step of selecting a media engine based on load and status (**DeFreese: Fig. 14, 16 & 30 and Abstract; near video on demand, program active listings/timings and messaging/warning mechanisms**).

16. Regarding **claim 19, DeFreese-Wilson** further disclose: wherein the first media engine has reached a predetermined maximum capacity when a second media console requests streaming of the same segment further comprising the steps of: directing a third media engine to fetch the segment, specifying a fourth media engine from which the segment is to be replicated;

requesting a copy by the third media engine of the segment from the fourth media engine (**Wilson: Fig. 11-12 and Abstract; PID and program tables**);

sending the segment from the fourth media engine (**DeFreese: Fig. 14, 16 & 30 and Abstract; near video on demand, program active listings/timings and messaging/warning mechanisms**);

replying to the second media console redirecting to the IP address of the third media engine (**Wilson: Fig. 11-12 and Abstract; PID and program tables**);

requesting by the second media console of playing of the stream (**DeFreese: Fig. 14, 16 & 30 and Abstract; near video on demand, program active listings/timings and messaging/warning mechanisms**); and,

responding by the third media engine forwarding data for the segment to the second media console (**DeFreese: Fig. 14, 16 & 30 and Abstract; near video on demand, program active listings/timings and messaging/warning mechanisms**).

17. Regarding **claim 20, DeFreese-Wilson** further disclose: further comprising the steps of:

sending a copy done from the third media engine to the MD when copying of the segment from the fourth media engine to the second media engine is complete (**DeFreese: Fig. 14, 16 & 30 and Abstract; near video on demand, program active listings/timings and messaging/warning mechanisms**); and, notifying the MLR of the new location for the segment (**Wilson: Fig. 11-12 and Abstract; PID and program tables**).

18. Regarding **claim 21, DeFreese-Wilson** further disclose: wherein the media director has directed the first media engine to fetch the first segment and wherein the

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step of redirecting occurs during receipt of the segment and the step of streaming data from the first media engine further comprising the steps of:

receiving a fast forward request of the stream from the media console

(DeFreeze: Fig. 14, 16 & 30 and Abstract; interactive program guide, comprehensive channel navigator and advanced configuration controls and NVOD with fast forwarding);

identifying the potential for a streaming error if the fast forward exceeds the portion of the segment which has been received by the media engine **(DeFreeze: Fig. 14, 16 & 30 and Abstract and Col. 7 lines 33- 63; NVOD and messaging/warning system);**

notifying the media director of the impending error state **(DeFreeze: Fig. 14, 16 & 30 and Abstract; near video on demand, program active listings/timings and messaging/warning mechanisms);**

replying to the media engine with the identification of a third media engine having the entire segment **(Wilson: Fig. 11-12 and Abstract; PID and program tables);**

requesting of the third media engine a swap identifying the media console in current communication **(DeFreeze: Fig. 14, 16 & 30 and Abstract and Col. 7 lines 33- 63; NVOD and messaging/warning system); and,**

streaming of data by the third media engine from the segment to media console **(DeFreeze: Fig. 14, 16 & 30 and Abstract and Col. 7 lines 33- 63; NVOD and messaging/warning system).**

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19. Regarding **claim 22, DeFreese-Wilson** further disclose: wherein the third media engine has also been streaming further comprising the steps of;

returning from the third media engine a swap identifying a second media console in communication (**DeFreese: Fig. 14, 16 & 30 and Abstract and Col. 7 lines 33- 63; NVOD and messaging/warning system**); and,

streaming of data by the first media engine to the second media console (**DeFreese: Fig. 14, 16 & 30 and Abstract and Col. 7 lines 33- 63; NVOD and messaging/warning system**).

20. Regarding **claim 23, DeFreese-Wilson** further disclose: further comprising prior to the step of redirecting the steps of:

requesting by the media console of a security token from a security authentication server on the network; confirmation of subscriber authentication for the media console; and, issuing the security token based on the subscriber authentication;

and the step of redirecting further includes the steps of: receiving the security token from the media console; confirming the security token with respect to the streaming request (**DeFreese: Fig. 14, 16 & 30 and Abstract; near video on demand, program active listings/timings, PIN entries and messaging/warning mechanisms**).

21. Regarding **claim 24, DeFreese-Wilson** further disclose: further comprising the steps of:

authenticating each media engine by an authentication server; supplying a second security token to each authenticated media engine; and wherein the step of

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requesting a copy of the segment includes receiving the second security token from the receiving media engine (**DeFreese: Fig. 14, 16 & 30 and Abstract; near video on demand, program active listings/timings, PIN entries and messaging/warning mechanisms**).

22. Regarding **claim 25, DeFreese-Wilson** further disclose: further comprising the steps of:

authenticating each media engine by an authentication server; supplying a second security token to each authenticated media engine; and wherein the step of requesting a copy of the segment includes receiving the second security token from the target media engine (**DeFreese: Fig. 14, 16 & 30 and Abstract; near video on demand, program active listings/timings, PIN entries and messaging/warning mechanisms**).

As per **claims 1-9** they list substantially the same elements as those recited above in **claims 10- 25** and are therefore rejected with the same rationale as applied to **claims 10- 25**.

Double Patenting

23. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

24. **Claims 1- 25** provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of **claims 1-27** of copending Application No. 10/826,519. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MACEEH ANWARI whose telephone number is (571)272-7591. The examiner can normally be reached on Monday-Friday 7:30-5:00 PM ES.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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M.A.

/William C. Vaughn, Jr./

Supervisory Patent Examiner, Art Unit 2444